

## **Annex 6 Summary of Meeting on Technology Transfer from Research to Commercial Application**

### **Summary of FNCA Meeting on Technology Transfer from Research to Commercial Application: Sharing of Experiences in Commercialization of Beneficial Nuclear Technology**

November 12th, 2010  
Manila City, the Philippines

1. The Meeting was organized following the conclusion of the FNCA 10<sup>th</sup> Ministerial Level meeting in December 2009.
2. The Meeting was participated by 45 experts from FNCA countries and scientists/engineers from the Philippines.
3. The Meeting noted some challenges the nuclear research institutions face in transferring research results from the laboratory to the market place e.g., public acceptance of nuclear technology, lack of experience of researchers who are trained for research and not for commercialization activities, facilities in nuclear institutions are not geared for commercial purposes, nuclear institutions cannot engage in business undertakings, and government support.
4. The Meeting noted the importance of disseminating information on nuclear technologies and the use of shared facilities to end-users through press releases, participation in technology fairs, conduct of executive management seminars and business forum, interaction with academic and professional societies, technical publications and brochures/newsletters for the public.
5. The Meeting noted that Japan, Malaysia and the Philippines have effective government frameworks to encourage and support the transfer of research achievements of national research institutes to private industry.
6. The Meeting noted that the FNCA projects have achieved research outcomes which can be developed to new commercial technologies and products. Those outcomes are the following: plant growth promoter, bio-fertilizer, hydrogel, insect-resistant orchid, and disease-resistant banana. These could be better transferred to commercial industry with the support of government. Indonesia, Japan, Korea, and Malaysia reported success stories of transfer of research outcomes to commercial applications.

7. The Meeting noted that the demand-driven approach should be balanced with the development of innovative technology. Continuous training of human capital should be integral to the strategy of technology transfer to ensure sustainability. Governments should be ready to invest in future innovative research including the establishment of facilities in order to ensure that the future needs of industry will be appropriately and promptly satisfied.
8. The Meeting agreed that :
  - a. The transfer of research results to industrial applications should be enhanced in order to optimize/maximize the use of research resources and to contribute to socio-economic development of the region;
  - b. The national system to support the development of new technologies is needed to encourage the private industry to develop new technologies from research results of national research institutes. Governments should provide the enabling environment in terms of policy, legislation, and financial support to enhance technology transfer and commercialization activities by the nuclear research institutions. Financial support is needed to fund activities between the laboratory stage and commercialization stage, e.g., patent applications, construction of the necessary pilot plant to study the technical and economic feasibility for the final decision of commercialization.
  - c. It is of great importance to select the appropriate project in national research institutes which fully meets the need of industry. The potential end-user should be involved as early as the formulation stage and should participate in the joint research with the nuclear institute. Linkage with professional associations provides the current trends in a particular industry, thus ensuring that research would be demand-driven.
  - d. Competitiveness of the product in the market should be one of the criteria in commercializing nuclear technologies. These should offer unique advantages and lower cost over the conventional technologies.
  - e. Relevant FNCA projects in the fields of industry and agriculture should be implemented with the aim of attaining commercial application of the developed technologies. FNCA member countries can cooperate in sharing experimental results, experience and information on the conduct of techno-economic feasibility study and commercialization strategies.